

# **Tucson Iron & Metal**

Custom Incineration

4484 East Tennessee Street, Tucson, Arizona 85714

Mailing Address: P.O. Box 28898, Tucson, Arizona 85726

(520) 884-1554 Fax: (520) 884-0860

March 5, 2021

Ms. Jackie Ronstadt  
Air Compliance Manager  
Pima County Department of Environmental Quality  
33 N. Stone Avenue, Suite 700,  
Tucson, AZ 85701

**Tucson Iron and Metal, Inc. (TIM)**  
**PDEQ Air Permit No. 127 / NSPS EEEE**  
**TIM Notice of Violation #127-0021R Response**  
**Tucson, Pima County, Arizona**

Dear Ms. Ronstadt:

Tucson Iron & Metal (TIM) is providing response to the Pima County Department of Environmental Quality (PDEQ) regarding the Notice of Violation #127-0021R. Alleged violations regarding the Other Solid Waste Incineration (OSWI) unit were based upon a review of PDEQ air permit #127 and review of TIM excess emissions reporting.

Alleged Violation #1: PDEQ alleges TIM gave notice to the agency of an excess emission that occurred at the TIM OSWI unit on January 12, 2021. Supporting records of the event were requested by PDEQ on January 28, 2021 which were provided by TIM. The supporting records suggested the CO @7%O<sub>2</sub> was such that TIM failed to meet the CO emission limitation during the entire incineration event on January 12, 2021, totaling 6 operational hours.

Requested Corrective Actions: PDEQ requests TIM provide a written quality assurance plan to ensure that the air quality permit #127 and the operation and maintenance plan are followed at all times, in addition to ensuring the operation of the OSWI unit meets emission limitations at all times except during startup, shutdown, and malfunction. Lastly, the quality assurance plan will also ensure there is oversight to the training and operation of the certified operators.

TIM Corrective Action:

TIM has a well-designed and well-executed comprehensive operation and maintenance plan (O&M Plan) that was established a quality assurance plan (QAP). Far from being merely a "paper program" the O&M Plan is integrated into the TIM process operation and is used on a daily basis in practice. The OSWI unit and in-place pollution abatement equipment (sorbent injection and baghouse systems) along with competent operating procedures are structured to assure compliant operation of the facility. TIM strives to employ 'best practices' in every aspect of the operation of its facilities. To this end TIM assures knowledge of regulatory requirements

for process operators are kept current with frequent communication concerning regulatory, operational and operator requirements.

The TIM OSWI unit meets emission limitations at all times except during startup, shutdown, and malfunctions. The OSWI unit system has some automatic controls that maintain the system in a safe range of operation that can occasionally cause carbon monoxide (CO) concentration spikes to be seen by the continuous emission monitoring system (CEMS). This may occur during the initial hours of operation, while the primary chamber shell is still warming up, during which the afterburner will shut burners down to avoid too high temperatures in the afterburner chamber followed by restart after a brief period of cool down. A CO concentration increase may occur during such cool down periods until the overall system is more uniformly heated. For episodes where the CO emission limitation is exceeded for a longer period of incineration TIM has found a malfunction or upset condition the cause and reported to PDEQ as such.

Thorough recordkeeping of operating parameters is maintained for each burn. Required reporting of process upsets and semi-annual and annual certifications are provided by TIM to PDEQ. The TIM contraband incinerator, an OSWI unit, is designed to achieve performance and compliance with PDEQ air permit #127 and NSPS EEEE requirements and limits. The OSWI unit operator is a NSPS EEEE qualified operator (QO) and he renews his training and qualification annually. Consulting engineering personnel provides initial QO training course covering required elements, including the thirteen subjects listed in NSPS EEEE, section 60.2905, and annual recertification reviews (section 60.2908) covering the 5 NSPS EEEE required topics. Stack testing is completed annually with 2-year periods of skipped testing allowed when testing demonstrates previous periods of compliance for a pollutant for 3 consecutive years.

TIM management schedules contraband burns with law enforcement agencies to dispose of waste that was previously kept by law enforcement as seized evidence of illegal drug activity. Management also sets policy and establishes company values. Lines of communication with staff are always maintained to assure that the company will be following compliant procedures with regard to incinerator operation. Up to date communication is maintained to assure reduction of risks and to sustain and improve performance over time. In addition to monitoring the OSWI system operation, testing and measuring operational parameters of the OSWI unit are crucial elements of a cycle for continual improvement. The robust testing and monitoring programs help process staff understand what is working and what needs improvement. Upset conditions affecting emission from the OSWI unit are routinely reported to PDEQ. Strong testing and training programs are in place as an aid to evaluate compliance assessments and to establish clear lines of responsibility and accountability for the OSWI unit. As an ongoing process, a trend is produced that helps facilitate making changes to underlying business practices and unit operational protocols; the O&M Plan is routinely refined and updated as needed. This described framework of process assessment methodology, communication and recordkeeping helps prioritize compliance assurance issues and helps maintain positive business activity.

Alleged Violation #2: PDEQ alleges TIM gave notice to the agency of an excess emission that occurred at the TIM OSWI unit on January 12, 2021. Supporting records of the event were requested by PDEQ on January 28, 2021 which were provided by TIM. The supporting records suggested the average CO @7%O<sub>2</sub> was 497.2 parts per million (ppm) during the entire incineration event on January 12, 2021, totaling 6 operational hours. TIM failed to meet the CO emission limitation of 40 ppm CO @7%O<sub>2</sub> and failed to report the excess emission to PDEQ. Excess emissions must be reported to PDEQ within 24 hours of the excess emission by phone or email and a detailed report must be submitted to PDEQ within 72 hours of the notification.

Requested Corrective Actions: Provide a detailed written report and corrective actions to correct the excess emission and prevent it from occurring in the future. The report shall contain the location of the emission point; the magnitude of the emission; the date, time and duration of the excess emission; identifying the equipment the emission emanated from, the nature and cause of the emissions, and the steps that were taken or are being taken to limit the excess emissions. In addition, review previous incineration events leading up to and after the January 12, 2021 incineration event for other CO excess emission events during normal operation of the OSWI unit and report those events according to the reporting requirements in air quality permit #127.

TIM Corrective Action:

The emission point location is the OSWI unit exhaust stack, EPN 1, at the facility located at 4484 E. Tennessee Street, Tucson, Arizona. The excess emissions report filed with PDEQ on January 15, 2021, attached as Appendix A, indicated that excess emissions were caused by failure of the baghouse air compressor which prevented reverse air pulse cleaning of the fabric filter media in the baghouse.

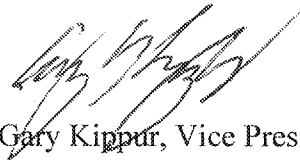
PDEQ determined from supporting documentation provided by TIM from the CEMS records that the average CO @7%O<sub>2</sub> was 497.2 parts per million (ppm) during the entire incineration event on January 12, 2021, covering 6 operational hours. TIM has calculated that 40 ppm CO @7%O<sub>2</sub> is equivalent to 1.29 pounds per hour (lb/hr) CO. The average 497.2 ppm CO @7%O<sub>2</sub> is equivalent to  $(497.2 \text{ ppm} / 40 \text{ ppm}) = 12.43$  times the emission limit or  $(12.43)(1.29 \text{ lb CO/hr}) = 16.03 \text{ lb CO/hr}$ . If this persisted for 6 hours then the total CO emission during the burn was  $(16.03 \text{ lb CO/hr})(6 \text{ hours}) = 96.21 \text{ lb CO}$ .

The primary corrective action that TIM has taken to correct the excess CO emission is to investigate and assess the cause of the emission followed by review with the process QO and detailing updated process operation procedures. TIM is taking steps to ensure that contraband is only fed when the afterburner is at compliant temperature, including updating the OSWI unit operator regarding prolonging the startup to allow the primary chamber to come to a higher temperature before contraband is fed in.

TIM has reviewed all incineration events between September 10, 2020, and March 2, 2021 and is providing excess emissions reports for any other CO excess emissions events during that date range. These reports are attached here as Appendix B.

I am the Responsible Official (R.O.) for Tucson Iron & Metal and based on information and belief formed after reasonable inquiry, the information contained herein is true and accurate. If you have any questions or require additional information, please contact me at 520-884-1554.

Sincerely,



Gary Kippur, Vice President

cc: Mr. Matt Salazar, Manager  
Enforcement ENF-2-1  
U.S. EPA Region 9  
75 Hawthorne Street  
San Francisco, CA, 94105-3901

Irvin Bilsky, P.E.  
Bilsky Environmental  
P. O. Box 26044  
Austin, Texas 78755  
(512) 799-6048

Mr. Rupesh Patel, Air Permits Manager  
Pima County Department of Environmental Quality  
33 N. Stone Avenue, Suite 700  
Tucson, Arizona 85701-1429